RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _/0/5 83, 464_

Source: _1 Fw P_

Date Processed by STIC: _6/27/06_

ENTERED

IFWP

RAW SEQUENCE LISTING   DATE: 06/27/2006
PATENT APPLICATION: **US/10/583,464**   TIME: 12:22:50

Input Set : **A:\025721-110US.ST25.txt**
Output Set: **N:\CRF4\06272006\J583464.raw**

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        3 <110> APPLICANT: Arumugham, Rasappa
        4         Prasad, A. Krishna
        6 <120> TITLE OF INVENTION: Methods of Producing Immunogenic Peptide Carrier Conjugates
        8 <130> FILE REFERENCE: 025721-000110US
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/583,464
C--> 11 <141> CURRENT FILING DATE: 2006-06-16
       13 <150> PRIOR APPLICATION NUMBER: US 60/530,480
       14 <151> PRIOR FILING DATE: 2003-12-17
       16 <160> NUMBER OF SEQ ID NOS: 54
       18 <170> SOFTWARE: PatentIn version 3.3
       20 <210> SEQ ID NO: 1
       21 <211> LENGTH: 6
       22 <212> TYPE: PRT
       23 <213> ORGANISM: Homo sapiens
       25 <400> SEQUENCE: 1
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       28 1               5
       31 <210> SEQ ID NO: 2
       32 <211> LENGTH: 8
       33 <212> TYPE: PRT
       34 <213> ORGANISM: Homo sapiens
       36 <400> SEQUENCE: 2
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       39 1               5
       42 <210> SEQ ID NO: 3
       43 <211> LENGTH: 10
       44 <212> TYPE: PRT
       45 <213> ORGANISM: Homo sapiens
       47 <400> SEQUENCE: 3
       49 Asp Ala Glu Phe Arg His Asp Ser Gly Cys
       50 1               5               10
       53 <210> SEQ ID NO: 4
       54 <211> LENGTH: 13
       55 <212> TYPE: PRT
       56 <213> ORGANISM: Homo sapiens
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       61 1               5               10
       64 <210> SEQ ID NO: 5
       65 <211> LENGTH: 10
       66 <212> TYPE: PRT
       67 <213> ORGANISM: Homo sapiens
       69 <400> SEQUENCE: 5
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PATENT APPLICATION: US/10/583,464   TIME: 12:22:50

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Output Set: N:\CRF4\06272006\J583464.raw

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75 <210> SEQ ID NO: 6
76 <211> LENGTH: 12
77 <212> TYPE: PRT
78 <213> ORGANISM: Homo sapiens
80 <400> SEQUENCE: 6
82 Asp Ala Glu Phe Arg His Asp Gly Ala Gly Ala Cys
83 1               5                   10
86 <210> SEQ ID NO: 7
87 <211> LENGTH: 14
88 <212> TYPE: PRT
89 <213> ORGANISM: Homo sapiens
91 <400> SEQUENCE: 7
93 Asp Ala Glu Phe Arg His Asp Ser Gly Gly Ala Gly Ala Cys
94 1               5                   10
97 <210> SEQ ID NO: 8
98 <211> LENGTH: 17
99 <212> TYPE: PRT
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 8
104 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val Gly Ala Gly Ala
105 1               5                   10                  15
108 Cys
112 <210> SEQ ID NO: 9
113 <211> LENGTH: 13
114 <212> TYPE: PRT
115 <213> ORGANISM: Homo sapiens
117 <400> SEQUENCE: 9
119 Val Glu Tyr Gly Ser Asp His Arg Phe Glu Ala Asp Cys
120 1               5                   10
123 <210> SEQ ID NO: 10
124 <211> LENGTH: 4
125 <212> TYPE: PRT
126 <213> ORGANISM: Homo sapiens
128 <400> SEQUENCE: 10
130 Gly Ala Gly Ala
131 1
134 <210> SEQ ID NO: 11
135 <211> LENGTH: 13
136 <212> TYPE: PRT
137 <213> ORGANISM: Homo sapiens
139 <400> SEQUENCE: 11
141 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr
142 1               5                   10
145 <210> SEQ ID NO: 12
146 <211> LENGTH: 13
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens
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RAW SEQUENCE LISTING   DATE: 06/27/2006
PATENT APPLICATION: **US/10/583,464**   TIME: 12:22:50

Input Set : **A:\025721-110US.ST25.txt**
Output Set: **N:\CRF4\06272006\J583464.raw**

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151 <220> FEATURE:
152 <221> NAME/KEY: misc_feature
153 <222> LOCATION: (3)..(3)
154 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
156 <400> SEQUENCE: 12
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    159 1   5   10

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163 <211> LENGTH: 16
164 <212> TYPE: PRT
165 <213> ORGANISM: Homo sapiens
167 <400> SEQUENCE: 13
169 Glu Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe Asn Val
170 1             5                   10                  15
173 <210> SEQ ID NO: 14
174 <211> LENGTH: 10
175 <212> TYPE: PRT
176 <213> ORGANISM: Homo sapiens
178 <400> SEQUENCE: 14
180 Phe Glu Leu Leu Thr Arg Ile Leu Thr Ile
181 1             5                   10
184 <210> SEQ ID NO: 15
185 <211> LENGTH: 19
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 15
191 Asp Gln Ser Ile Gly Asp Leu Ile Ala Glu Ala Met Asp Lys Val Gly
192 1             5                   10                  15
195 Asn Glu Gly
199 <210> SEQ ID NO: 16
200 <211> LENGTH: 14
201 <212> TYPE: PRT
202 <213> ORGANISM: Homo sapiens
204 <400> SEQUENCE: 16
206 Gln Val His Phe Gln Pro Leu Pro Pro Ala Val Val Lys Leu
207 1             5                   10
210 <210> SEQ ID NO: 17
211 <211> LENGTH: 15
212 <212> TYPE: PRT
213 <213> ORGANISM: Homo sapiens
215 <400> SEQUENCE: 17
217 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
218 1             5                   10                  15
221 <210> SEQ ID NO: 18
222 <211> LENGTH: 21
223 <212> TYPE: PRT
224 <213> ORGANISM: Homo sapiens
226 <400> SEQUENCE: 18
228 Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser
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RAW SEQUENCE LISTING   DATE: 06/27/2006
PATENT APPLICATION: US/10/583,464   TIME: 12:22:50

Input Set : A:\025721-110US.ST25.txt
Output Set: N:\CRF4\06272006\J583464.raw

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229 1              5               10              15
232 Ala Ser His Leu Glu
233         20
236 <210> SEQ ID NO: 19
237 <211> LENGTH: 15
238 <212> TYPE: PRT
239 <213> ORGANISM: Homo sapiens
241 <400> SEQUENCE: 19
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244 1              5               10              15
247 <210> SEQ ID NO: 20
248 <211> LENGTH: 51
249 <212> TYPE: PRT
250 <213> ORGANISM: Homo sapiens
252 <400> SEQUENCE: 20
254 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
255 1              5               10              15
258 Ile Gly Ile Thr Glu Leu Cys Phe Asn Asn Phe Thr Val Ser Phe Trp
259         20              25              30
262 Leu Arg Val Pro Lys Val Ser Ala Ser His Leu Glu Asp Ala Glu Phe
263         35              40              45
266 Arg His Asp
267     50
270 <210> SEQ ID NO: 21
271 <211> LENGTH: 42
272 <212> TYPE: PRT
273 <213> ORGANISM: Homo sapiens
275 <400> SEQUENCE: 21
277 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
278 1              5               10              15
281 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
282         20              25              30
285 Gly Leu Met Val Gly Gly Val Val Ile Ala
286         35              40
289 <210> SEQ ID NO: 22
290 <211> LENGTH: 22
291 <212> TYPE: PRT
292 <213> ORGANISM: Homo sapiens
294 <400> SEQUENCE: 22
296 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
297 1              5               10              15
300 Ile Gly Ile Thr Glu Leu
301         20
304 <210> SEQ ID NO: 23
305 <211> LENGTH: 28
306 <212> TYPE: PRT
307 <213> ORGANISM: Homo sapiens
309 <400> SEQUENCE: 23
311 Asp Ala Glu Phe Arg His Asp Phe Asn Asn Phe Thr Val Ser Phe Trp
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PATENT APPLICATION: US/10/583,464   TIME: 12:22:50

Input Set : A:\025721-110US.ST25.txt
Output Set: N:\CRF4\06272006\J583464.raw

```
312 1              5              10              15
315 Leu Arg Val Pro Lys Val Ser Ala Ser His Leu Glu
316            20              25
319 <210> SEQ ID NO: 24
320 <211> LENGTH: 43
321 <212> TYPE: PRT
322 <213> ORGANISM: Homo sapiens
324 <400> SEQUENCE: 24
326 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
327 1              5              10              15
330 Ile Gly Ile Thr Glu Leu Phe Asn Asn Phe Thr Val Ser Phe Trp Leu
331            20              25              30
334 Arg Val Pro Lys Val Ser Ala Ser His Leu Glu
335            35              40
338 <210> SEQ ID NO: 25
339 <211> LENGTH: 22
340 <212> TYPE: PRT
341 <213> ORGANISM: Homo sapiens
343 <400> SEQUENCE: 25
345 Glu Phe Arg His Asp Ser Gly Gln Tyr Ile Lys Ala Asn Ser Lys Phe
346 1              5              10              15
349 Ile Gly Ile Thr Glu Leu
350            20
353 <210> SEQ ID NO: 26
354 <211> LENGTH: 20
355 <212> TYPE: PRT
356 <213> ORGANISM: Homo sapiens
359 <220> FEATURE:
360 <221> NAME/KEY: misc_feature
361 <222> LOCATION: (3)..(3)
362 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
364 <400> SEQUENCE: 26
W--> 366 Ala Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala Ala Ala Asp Ala Glu
367 1              5              10              15
370 Phe Arg His Asp
371            20
374 <210> SEQ ID NO: 27
375 <211> LENGTH: 34
376 <212> TYPE: PRT
377 <213> ORGANISM: Homo sapiens
380 <220> FEATURE:
381 <221> NAME/KEY: misc_feature
382 <222> LOCATION: (24)..(24)
383 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
385 <400> SEQUENCE: 27
387 Asp Ala Glu Phe Arg His Asp Asp Ala Glu Phe Arg His Asp Asp Ala
388 1              5              10              15
W--> 391 Glu Phe Arg His Asp Ala Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala
392            20              25              30
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 06/27/2006
PATENT APPLICATION: **US/10/583,464**   TIME: 12:22:51

Input Set : **A:\025721-110US.ST25.txt**
Output Set: **N:\CRF4\06272006\J583464.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:12; Xaa Pos. 3
Seq#:26; Xaa Pos. 3
Seq#:27; Xaa Pos. 24
Seq#:28; Xaa Pos. 3
Seq#:29; Xaa Pos. 10

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:43,44,45,46,47,48,49,50,51,52,53,54

VERIFICATION SUMMARY   DATE: 06/27/2006
PATENT APPLICATION: **US/10/583,464**   TIME: 12:22:51

Input Set : **A:\025721-110US.ST25.txt**
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L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:16
L:412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
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